

REMARKS

The invention is directed to a solid detergent composition and to a method for solidifying a detergent composition. The solid detergent composition includes about 0.1 wt.% to about 20 wt.% of a surfactant, about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof, about 10 wt.% to about 80 wt.% of alkali metal carbonate, about 1 wt.% to about 40 wt.% alkali metal bicarbonate, and a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate so that the detergent composition forms an extruded solid within about 20 minutes of extrusion. The alkali metal carbonate, alkali metal bicarbonate, and water that reacts with the alkali metal carbonate and the alkali metal bicarbonate can be characterized as a binding agent and is provided as dispersed throughout the solid detergent composition to provide the solid detergent composition as a solid at a temperature up to about 100° F.

The Office Action includes one prior art-based rejection. Claims 1, 2, 4-6, 10, 14, 18, and 19 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,576,282 (*Miracle et al.*). To the extent this rejection applies to the presently pending claims, this rejection is traversed.

Miracle et al. fail to disclose or suggest a solid detergent composition or a method for solidifying a detergent composition that includes an effective amount of a cleaning agent to provide soil removal, wherein the cleaning agent comprises about 0.1 wt.% to about 20 wt.% of a surfactant based on the weight of the solid detergent composition, and about 1 wt.% to about 50 wt.% phosphonate, amino-carboxylate, or mixture thereof based on the weight of the detergent composition, and an effective amount of a binding agent dispersed throughout the solid detergent composition, wherein the binding agent comprises a result of mixing about 10 wt.% to about 80 wt.% alkali metal carbonate, based on the weight of the detergent composition, about 1 wt.% to about 40 wt.% alkali metal bicarbonate, based on the weight of the detergent composition, and a sufficient amount of water to react with the alkali metal carbonate and the alkali metal bicarbonate, so that the detergent composition forms an extruded solid at a temperature up to about 100° F within about 20 minutes of extrusion.

The outstanding Office Action points to several locations of *Miracle et al.* for the disclosure of various components. For example, the Office Action points to *Miracle et al.* at column 12, lines 18+, for the disclosure of carbonates, bicarbonates, and sesquicarbonates, to *Miracle et al.* at column 10, lines 10+, for the disclosure of a mixture of nonionic and anionic

surfactants, to *Miracle et al.* at column 9, line 61; for the addition of enzymes, and to *Miracle et al.* at column 30, line 35+ for the disclosure of an aqueous slurry.

It is recognized that *Miracle et al.* mentioned carbonates and bicarbonates in a list of builders at column 12, line 13 through column 14, line 37. In addition to carbonate and bicarbonate, the list of builders additionally includes phosphonates. See *Miracle et al.* at column 12, lines 28-40. The presently claimed solid detergent composition provides for the presence of about 3 wt.% to about 35 wt.% phosphonate, amino-carboxylate, or mixture of phosphonate and amino-carboxylate based on the weight of the detergent composition, and requires the presence of about 10 wt.% alkali metal carbonate, based on the weight of the detergent composition, and about 1 wt.% to about 40 wt.% alkali metal bicarbonate, based on the weight of the detergent composition. There is no disclosure or suggestion by *Miracle et al.* that their composition should include these amounts of phosphonate, alkali metal carbonate, and alkali metal bicarbonate. Clearly, one having ordinary skill in the art would not have received the suggestion from *Miracle et al.* to select these "builders" and combine them in the amounts provided according to the present invention to achieve a solid detergent composition. In fact, the present invention provides for the presence of alkali metal carbonate and alkali metal bicarbonate and water to help solidify the detergent composition according to the present invention.

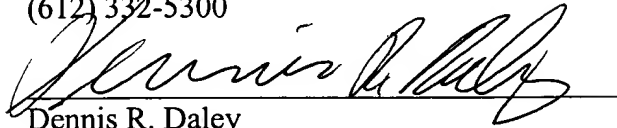
Miracle et al. are not directed at a solid detergent composition that remains a solid at a temperature up to about 100° F or that can be characterized as having a melting temperature greater than 100° F. It appears that the "bar " disclosed in example VII of *Miracle et al.* is relied upon for the disclosure of a solid. It is pointed out that the "bar" of example VII of *Miracle et al.* relies upon the presence of 30 wt.% C₁₂ linear alkyl benzene sulphonate and 2 wt.% coconut monoethanolamide as waxy solids that hold the other solid components of the composition together. No reason has been provided to explain why one would expect the composition to remain a solid at a temperature of greater than 100° F.

In view of the above comments, one having ordinary skill in the art would not have received the suggestion from *Miracle et al.* to provide a solid detergent composition according to the present invention. Accordingly, withdrawal of the prior art-based rejection is requested.

It is believed that this application is in condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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